1999 Water Quality Data

PARAMETER	MAJOR SOURCES
MICROBIOLOGY	
Total Coliform Bacteria (c)	Naturally present in the environment
ORGANIC CHEMICALS	
Total Trihalomethanes (ppb)(d)	By-product of drinking water water chlorination
cis-1, 2-Dichlorethylene (ppb)	Discharge from industrial chemical factories
INORGANIC CHEMICALS	
Arsenic (ppb)	Erosion of Natural Deposits
Barium (ppm)	Erosion of Natural Deposits
Beryllium (ppb)	Discharge from metal refineries and coal burning
Chromium (ppb)	Erosion of Natural Deposits
Copper (ppm) (e)	Corrosion of household plumbing systems
Fluoride (ppm)	Erosion of natural deposits; Water additive which promotes strong teeth
Lead (ppb) (e)	Corrosion of household plumbing system
Nickel (ppb)	Corrosion of bronze
Nitrate (as N) (ppm)	Erosion of natural deposits; Runoff form fertilizer use
Nitrite (as N) (ppm)	Erosion of natural deposits; Runoff form fertilizer use
Selenium (ppm)	Erosion of natural deposits
Sodium (ppm)	Erosion of natural deposits and sea water
Thallium (ppb)	Discharge from electronics, glass and drug factories
RADIONUCLIDES	
Alpha Emitters (pCi/L)	Erosion of Natural Deposits
UNREGULATED CONTAMINANTS	
Chloroform (ppb)	By-product of drinking water chlorination
Bromodichloromethhane (ppb)	By-product of drinking water chlorination

ABBREVIATIONS AND NOTES

AL = Action Level
N/A = Not Applicable
ND = None Detected
NE = None Established
pCI / L = picoCuries per Liter

ppb = parts per billion or micrograms per liter (mg / L)
ppm = parts per million or milligrams per liter (mg / L)
( ) = Ranges (low-high) are given in parenthesis where applicable

a. MCL = Maximum Contaminant Level
b. Federal Goal = MCLG = Maximum Contaminant Level Goal
c. The MCL for total Coliform bacteria states that drinking water must not show the presence of cliform in >5% of monthly samples. A minimum of 390 samples for total Coliform bacteria testing are collected each month from the Main distribution system (50 samples form the south Dade Water Supply distribution system) in order to demonstrate compliance with State regulations.
d. A total of 48 samples for Total trihalomethane testing are collected per year from the main distribution system (16 samples from the South Dade Water Supply distribution system) in order to demonstrate compliance with State regulations. Compliance is based on a running annual average.
e. Testing for arsenic, barium, nickel, sodium and gross alpha is required every three years in accordance with the State's monitoring framework.
f. 90th percentile value reported. If the 90th percentile value does not exceed the AL (less than 10% of the homes have levels above the AL), the system is in compliance and is utilizing the prescribed corrosion control measures.
g. Fluoride testing to demonstrate compliance with State regulations is required every three in accordance with the State's monitoring framework. Fluoride levels are monitored daily for the Main system treatment plants where fluoride is added to promote strong teeth.

* THE CITY OF HIALEAH OBTAINS ALL OF IT'S WATER FROM MIAMI DADE COUNTY.

DISIFFECTION BYPRODUCTS DETECTED
EPA INFORMATION COLLECTION RULE
DATA GATHERING EFFORT (a)

DISIFFECTION BYPRODUCTS	Federal Goal (a)	Federal MCL (b)	State MCL	Year Tested
Haloacetic Acids (HAA5) (ppb) (c)	60	NE	NE	98
Haloacetontriles (HANs) (ppb) (d):	NE	NE	NE	98
Haloketones (ppb) (e)	NE	NE	NE	98
Chloral Hydrate (ppb)	NE	NE	NE	98
Cyanogen Chloride	NE	NE	NE	98
Total Organic Halides (TOX) (ppb) (g)	NE	NE	NE	98
DISINFECTANT RESIDUALS	MDRL(b)	MDRLG	MDRL	
Chloramine (ppm)	4.0	4	NE	98
Chlorine (ppm)	4.0	4	NE	98

DISIFFECTION BYPRODUCTS	*Miami-Dade County Water Treatment Plant*
	JOHN E. PRESTON
Haloacetic Acids (HAA5) (pb) (c)	71 (41-93)
Haloacetontriles (HANs) (ppb) (d):	7.5 (4.2-10.1)
Haloketones (ppb) (e)	1.7 (1.2-2.4)
Chloral Hydrate (ppb)	4.4 (1.6-7.4)
Cyanogen Chloride	5.9 (4.2-7.8)
Total Organic Halides (TOX) (ppb) (g)	334 (244-371)
DISINFECTANT RESIDUALS	
Chloramine (ppm)	3.1 (3.0-3.2)
Chlorine (ppm)	

DISIFFECTION BYPRODUCTS	MAJOR SOURCES
Haloacetic Acids (HAA5) (pb) (c)	Byproduct of Drinking Water Chlorination
Haloacetontriles (HANs) (ppb) (d):	Byproduct of Drinking Water Chlorination
Haloketones (ppb) (e)	Byproduct of Drinking Water Chlorination
Chloral Hydrate (ppb)	Byproduct of Drinking Water Chlorination
Cyanogen Chloride	Byproduct of Drinking Water Chlorination
Total Organic Halides (TOX) (ppb) (g)	Byproduct of Drinking Water Chlorination

DISINFECTANT RESIDUALS	
Chloramine (ppm)	Addition of Chlorine or Chloramine to drinking water for disinfection
Chlorine (ppm)	

ABBREVIATIONS AND NOTES

ppm = parts per million or milligrams per liter (mg / L)
ppb = parts per billion or micrograms per liter (mg / L)
ND = None Detected
NE = None Established
MDRL = Maxium Disinfectant Risidual Level
MDRLG = Maxium Disinfectant Risidual Level Goal

a. Data presented as the average form all samples collected in 1998 with the range (low-high) in parenthesis.
b. Effective date for compliance is December 2003.
c. HAA5= the sum of the following individual Haloacetic acids: Monochloroactic, Dichloroacetic acid, Tricloroactic acid, Monobromoactic acid Dibromoacetic acid.
d. HAN= the sum of the following Haloacetonitriles: Dichloracetonitrile, Trichloracetonitrile, Bromochloroacetonitrile and Dibromoacetonitrile. Trichloroacetonitrile was not detected in WASD's treaded water.
e. Haloketones= the sum of the following haloketones: 1,1-dichloropropanone and 1,1,1-trichloropropanone.
f. Testing for cyanogen chloride was only required for systems using chloramines for disinfection. The South Dade System users chlorine.
g. TOX is a surrogate parameter used to indicate the potential that a water has for forming disinfectoin byproducts when a disinfectant is added to it

RADON DATA SUMMARY

PARAMETER	Federal Goal (a)	Federal MCL (b)	State MCL	Year Tested
RADON (pCi/L)	NE	NE	NE	98

PARAMETER	*Miami-Dade County Water Treatment Plant*
	JOHN E. PRESTON
RADON (pCi/L)	<30

DISINFECTION BYPRODUCTS	MAJOR SOURCES
RADON (pCi/L)	Naturally occurring in soil and rock formation

ABBREVIATIONS AND NOTES

NE = None Established